

## WHAT IS CLAIMED IS:

1           1. A mobile station capable of communicating with a  
2 plurality of base stations in a wireless network and receiving at  
3 least one of a software program, a software correction patch and  
4 provisioning data from a server associated with said wireless  
5 network, said mobile station comprising:

6           an RF transceiver capable of receiving wireless messages  
7 from said plurality of base stations and converting said received  
8 wireless messages to a plurality of Internet protocol (IP) packets;

9           an encryption controller capable of converting said IP  
10 packets from an encrypted format to a decrypted format; and

11           a data burst message protocol controller capable of  
12 converting said decrypted IP packets to at least one data burst  
13 message.

2. The mobile station as set forth in Claim 1 wherein said encryption controller is capable of encrypting and decrypting IP packets according to at least one of:

IP Sec tunneling protocol;

Secure Shell (SSH) tunneling protocol;

Secure Sockets Layer/Transport Layer Security (SSL/TLS);

and

point-to-point tunneling protocol (PPTP).

3. The mobile station as set forth in Claim 1 wherein each of said IP packets comprise an IP layer and an IP packet payload.

4. The mobile station as set forth in Claim 4 wherein said IP packet payload comprises a transmission control protocol (TCP) layer.

5. The mobile station as set forth in Claim 4 wherein said IP packet payload comprises an over-the-air service provisioning payload associated with said at least one data burst message.

1           6.    The mobile station as set forth in Claim 1 wherein each  
2   of said IP packets comprises an IP layer, a transmission control  
3   protocol (TCP) layer and a IP packet payload.

1           7.    The mobile station as set forth in Claim 7 wherein said  
2   IP packet payload comprises an over-the-air service provisioning  
3   payload associated with said at least one data burst message.

1           8.    The mobile station as set forth in Claim 1 wherein said  
2   data burst message protocol controller is capable of converting  
3   said decrypted IP packets to said at least one data burst message  
4   according to at least one of: 1) an IS-683-A protocol; 2) a short  
5   messaging service (SMS) protocol; and 3) extensible mark-up  
6   language (XML) protocol.

1           9.    A system for secure over-the-air administration of a  
2 wireless mobile station via a base station in a wireless network,  
3 said system capable of transmitting to said wireless mobile station  
4 at least one of a software program, a software correction patch and  
5 provisioning data from a server associated with said wireless  
6 network, said system comprising:

7               a data burst message protocol controller capable of  
8 receiving and converting said at least one of a software program,  
9 a software correction patch and provisioning data into at least one  
10 data burst message;

11              an encryption controller capable of converting said at  
12 least one data burst message into a plurality of encrypted IP  
13 packets; and

14              an RF transceiver capable of converting said encrypted IP  
15 packets into at least one wireless message and transmitting said at  
16 least one wireless message to said wireless mobile station.

1           10. The system as set forth in Claim 9 wherein said  
2 encryption controller is capable of encrypting and decrypting IP  
3 packets according to at least one of:

4           IP Sec tunneling protocol;

5           Secure Shell (SSH) tunneling protocol;

6           Secure Sockets Layer/Transport Layer Security (SSL/TLS);

7           and

8           point-to-point tunneling protocol (PPTP).

11. The system as set forth in Claim 9 wherein each of said  
IP packets comprises an IP layer and a IP packet payload.

12. The system as set forth in Claim 11 wherein said IP  
packet payload comprises a transmission control protocol (TCP)  
layer.

13. The system as set forth in Claim 12 wherein said IP  
packet payload comprises an over-the-air service provisioning  
payload associated with said at least one data burst message.

1           14. The system as set forth in Claim 9 wherein each of said  
2 IP packets comprises an IP layer, a transmission control protocol  
3 (TCP) layer and a IP packet payload.

1           15. The system as set forth in Claim 14 wherein the IP packet  
2 payload comprises an over-the-air service provisioning payload  
3 associated with said at least one data burst message.

16. The system as set forth in Claim 9 wherein said data  
burst message protocol controller is capable of converting said at  
least one of a software program, a software correction patch and  
provisioning data to said at least one data burst message according  
to at least one of: 1) an IS-683-A protocol; 2) a short messaging  
service (SMS) protocol; and 3) extensible mark-up language (XML)  
protocol.

1           17. For use a wireless network, a method for securely  
2 transmitting to a wireless mobile station at least one of a  
3 software program, a software correction patch and provisioning data  
4 from a server associated with the wireless network, the method  
5 comprising the steps of:

6           receiving and converting the at least one of a software  
7 program, a software correction patch and provisioning data into at  
8 least one data burst message;

9           converting the at least one data burst message into a  
10 plurality of encrypted IP packets;

11           converting the encrypted IP packets into at least one  
12 wireless message; and

13           transmitting the at least one wireless message to the  
14 wireless mobile station.

1 18. The method as set forth in Claim 17 including the further  
2 steps of encrypting and decrypting IP packets according to at least  
3 one of:

4 IP Sec tunneling protocol;

5 Secure Shell (SSH) tunneling protocol;

6 Secure Sockets Layer/Transport Layer Security (SSL/TLS);

7 and

8 point-to-point tunneling protocol (PPTP).

19. The method as set forth in Claim 17 wherein each of the  
IP packets comprises an IP layer and a IP packet payload.

20. The method as set forth in Claim 19 wherein the IP packet  
payload comprises a transmission control protocol (TCP) layer.

21. The method as set forth in Claim 20 wherein the IP packet  
payload comprises an over-the-air service provisioning payload  
associated with the at least one data burst message.



22. The method as set forth in Claim 17 wherein each of the IP packets comprises an IP layer, a transmission control protocol (TCP) layer and a IP packet payload.

23. The method as set forth in Claim 22 wherein the IP packet payload comprises an over-the-air service provisioning payload associated with the at least one data burst message.

24. The method as set forth in Claim 17 wherein the steps of receiving and converting the at least one of a software program, a software correction patch and provisioning data into at least one data burst message comprises the sub-sep of converting the at least one of a software program, a software correction patch and provisioning data into at least one data burst message according to at least one of: 1) an IS-683-A protocol; 2) a short messaging service (SMS) protocol; and 3) extensible mark-up language (XML) protocol.